## **Recovery Plan Action Status**

Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)

Plan Status: Final Plan Date: 18-May-99 Lead Agency: USFWS

Lead Office: South Florida Ecological Services Field Office 562-3909)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-h1.1	Acquire habitat for fragrant prickly- apple cactus (Cereus eriophorus var. fragrans)	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Non- governmental organizations, South Florida counties	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-h1.2.1	Control off-road vehicle use.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection	Other: Law Enforcement, Other: Regulations	Labor type not yet selected	Task currently conducted and cost is included in responsible agency's budget. Action lead(s): FDEP
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-h1.2.2	Control invasive and exotic plants.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, South Florida counties, Private industry, landowners, etc.	Management: Predator and Competitor Control	Labor type not yet selected	Cost is per acre (ex. 2/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): FDEP
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-h1.2.3	Reduce impacts associated with herbicide application.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, South Florida counties, Private industry, landowners, etc.	Management: Other	Labor type not yet selected	Task currently conducted and cost is included in responsible agency's budget. Action lead(s): FDEP
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-h1.2.4	Define and implement habitat management techniques.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost dependent upon type of management implemented. Action lead(s): FDEP
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-h1.2.5	Restore habitat.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 1/acre); Total cost dependent upon number of acres restored. Action lead(s): FDEP

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Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-h2.1	Determine effects of fire.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Public and private universities	Research: Ecosystem Studies	Labor type not yet selected	Action lead(s): FWS, FDEP, universities
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-h2.2	Determine effects of vegetative thinning.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Public and private universities	Research: Management Techniques	Labor type not yet selected	Action lead(s): FWS, FDEP, universities
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-h3.0	Continue public information efforts about xeric vegetative communities and their unique biota.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Non- governmental organizations, Florida Division of Forestry, Private industry, landowners, etc.	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s1.1	Inventory known populations.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Non- governmental organizations, Florida Natural Areas Inventory, South Florida counties	Research: Population Surveys	Labor type not yet selected	Action lead(s): FDEP, FNAI, NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s1.2	Search for additional populations.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, Non- governmental organizations, Florida Natural Areas Inventory, South Florida counties	Research: Population Surveys	Labor type not yet selected	Action lead(s): FDEP, FNAI, NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s1.3	Map distribution of known populations and suitable habitat.	Ongoing Current	FY 2000 - FY 2004		Florida Department of Environmental Protection, Florida Natural Areas Inventory, South Florida counties	Research: Population Surveys	Species Expert	Inventory and tagging of known individuals on public land is complete. Historic sites were visited and inventoried in 2006-2007. Action lead(s): FWS

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Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s2.1	Acquire or otherwise protect habitat through acquisition, conservation easements, or agreements with landowners.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, South Florida counties, Private industry, landowners, etc.	Acquisition: General	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s2.2	Use local or regional planning to protect habitat.	Ongoing Current	Prior to FY 1995		South Florida counties	Other: Administration, Other: Regulations	Labor type not yet selected	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.3.1	Characterize the habitat and identify suitable sites for experimental outplantings.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Environmental Protection, Non- governmental organizations	Research: Habitat Requirements, Research: Reintroduction	Labor type not yet selected	Action lead(s): FDEP, NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s2.3.2	Conduct experimental outplantings.	Not Started			Florida Department of Environmental Protection, Non- governmental organizations	Research: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s2.3.3	(Re)introduce plants to protected sites.	Not Started			Florida Department of Environmental Protection, Non- governmental organizations	Management: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.3.4	Monitor experimental outplantings.	Not Started			Florida Department of Environmental Protection, Non- governmental organizations, Public and private universities	Research: Reintroduction	Labor type not yet selected	Action lead(s): FDEP, NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.4.1	Conserve germ plasm.	Ongoing Current	FY 1995 - FY 1999		Non-governmental organizations, Private industry, landowners, etc.	Research: Propagation	Labor type not yet selected	Currently in collection; need to expand genetic diversity in collection. Action lead(s): NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.4.2	Continue propagation and development of successful horticultural methods.	Ongoing Current	Prior to FY 1995		Non-governmental organizations, Private industry, landowners, etc.	Research: Propagation	Labor type not yet selected	Action lead(s): NGO
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.4.3	Maintain ex situ collections.	Ongoing Current	Prior to FY 1995		Non-governmental organizations, Private industry, landowners, etc.	Research: Propagation	Labor type not yet selected	Action lead(s): NGO

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Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.5.1	Initiate section 7 consultation when applicable.	Ongoing Current	Prior to FY 1995		U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Geological Survey, Biological Resources Division, U.S. Federal Emergency Management Agency, U.S. Geological Survey, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Natural Resources Conservation Service , United States Coast Guard , U.S. Air Force, US Forest Service	Other: Regulations	Labor type not yet selected	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): All Federal agencies
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s2.5.2	Enforce take and trade prohibitions.	Ongoing Current	Prior to FY 1995		Florida Department of Agriculture and Consumer Services/Division of Plant Industry	Other: Law Enforcement	Labor type not yet selected	Cost included in standard operating budgets of participating agencies. Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s3.1	Study the reproductive biology of fragrant prickly-apple.	Complete	FY 1995 - FY 1999	FY 2008	Florida Department of Environmental Protection, Public and private universities	Research: Demographic Studies	Labor type not yet selected	Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s3.2	Study the response of fragrant prickly-apple to habitat management treatments.	Not Started			Florida Department of Environmental Protection, Public and private universities	Research: Management Techniques	Labor type not yet selected	Action lead(s): FDEP, universities
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	2	cefr-s3.3	Conduct genetic studies to document genetic variation within and between populations.	Not Started			Public and private universities	Research: Genetics	Labor type not yet selected	Action lead(s): universities
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	1	cefr-s4.1	Initiate quarterly monitoring program.	Ongoing Not Current	Prior to FY 1995		Florida Department of Environmental Protection	Research: Population Assessment	Labor type not yet selected	Action lead(s): FWS

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Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-s4.2	Collect and archive existing and historical data.	Complete	FY 2006	FY 2007	Florida Department of Environmental Protection, Non- governmental organizations, Florida Division of Forestry, Institute for Regional Conservation, Public and private universities	Research: General	Contract	Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-s5.0	Provide public information about the fragrant pricklyapple cactus.	Ongoing Current	Prior to FY 1995		Florida Department of Environmental Protection, South Florida counties	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS
Fragrant prickly- apple (Cereus eriophorus var. fragrans)	3	cefr-s6.0	Establish delisting criteria.	Not Started			Florida Department of Environmental Protection, South Florida counties, Public and private universities	Other: Administration	Internal Administrative	Action lead(s): FWS